REMARKS

Applicants express appreciation to the Examiner for the interview held on June 9, 2006. The claims have been amended as proposed at the interview. By this paper, claims 21, 31 and 34 have been cancelled without prejudice, and independent claims 1 and 28 have been amended, as well as dependent claims 6, 9 and 27. Claims 35 – 40 were withdrawn pursuant to a provisional election. Applicants hereby affirm the provisional election of claims 1 – 9 and 11 – 34.[1] Thus, claims 1 – 20, 22 – 30 and 32 – 34 are presented for reconsideration.

Applicants have made minor amendments to address the Examiner's rejection of claim 9 under 35 U.S.C. § 112 second paragraph. Thus the term "tray-like" has been replaced with "tray" in claim 9 and claim 6, from which claim 9 depends. A minor typographical correction has been made to claim 27.

In the Office Action claims 1 – 9 and 11 – 34 were rejected under 35 U.S.C. § 102(b) as anticipated by one or more of PCT Publication No. WO 99/62472 (Wolf), U. S. Pat. No. 5,863,202 (Fontenot et al.), or U. S. Pat. No. 6,343,932 (Wiesel), and/or under 35 U.S.C. § 103(a) as obvious in view of U. S. Pat. No. 6,096,328 (Sagel et al.) as combined with U. S. Pat. No. 6,086,370 (Jensen et al.).

At the interview, as noted in the interview summary, it was "proposed to amend the independent claims to further [define] the protective barrier composition as . . . comprising a hydrophilic polymer and at least some dental bleaching agent in a lower concentration than that of the bleaching composition." The interview summary goes on to note that "This would appear to define over the prior art of record subject to the examiner's review of the formal amendment and updating the search."

Independent claims 1 and 28 have been amended as proposed. Thus, claim 1 defines a dental bleaching device comprised of a barrier layer, a dental bleaching composition, positioned relative to said barrier layer so as to contact a person's teeth during use, comprising at least one dental bleaching agent, and "a protective adhesive composition, positioned relative to said barrier layer and so as to shield a user's gums from said bleaching composition during use, comprising at least one tissue adhesion agent that includes at least one hydrophilic polymer, and a dental bleaching agent in a lower concentration than the dental bleaching agent contained in said dental

[1] As noted in the Office Action, claim 1 is generic. Thus, applicants request that consideration be given to claim 10 which depends from claim 1 in the event of its allowance in generic form, pursuant to 37 CFR 1.141.

bleaching composition." Claim 28 is similar except that the dental bleaching device is defined as having a dental tray having flexibility so as to readily conform to a person's teeth during use, a dental bleaching gel, positioned relative to said dental tray so as to contact a person's teeth during use, comprising at least one dental bleaching agent, at least one thickening agent, and a liquid or gel carrier, and "a protective adhesive composition, positioned relative to said dental tray so as to shield a person's soft tissues from said bleaching gel during use, comprising at least one tissue adhesion agent that includes at least one hydrophilic polymer, and a dental bleaching agent in a lower concentration than the dental bleaching agent contained in said dental bleaching gel."

As discussed at the interview and as noted in the interview summary, independent claims 1 and 28 are not anticipated nor made obvious by the prior art, either singly or in combination. In particular, the prior art does not teach or suggest the use of a protective adhesive composition to shield a person's soft tissues from the bleaching gel during use, which is comprised of a tissue adhesion agent that includes at least one hydrophilic polymer, and a dental bleaching agent in a lower concentration than the dental bleaching agent contained in the dental bleaching gel.

For example, Wolf a whitening strip that includes an active section A having a whitening agent, and "an inactive section I that does not include a whitening agent." Page 5 lines 4 – 5. Moreover, adhesive is applied to both the active and inactive sections to adhere the whitening strip to the teeth and gum tissue. Id. at lines 9 – 11. Fontenot et al. discloses a dental tray which includes a material 7 (see Fig. 5) within it that serves as a buffer region in the area around the periodontal tissue. Col. 6 lines 9 – 13. The buffer region 7 "protects against the potential untoward side effects of dental agent 3" and "may include any biocompatible agent . . . such as vitamin E, and . . . zinc oxide eugenol." Col. 8 lines 41 – 49. Thus, neither reference teaches or suggests a protective adhesive composition "which includes a dental bleaching agent in a lower concentration that the dental bleaching agent contained in the dental bleaching gel." Indeed, in this respect, both references actually are contrary in their teaching.[2]

Wiesel describes a whitening system (see Figs. 1 – 3) that has a flat, elongated thin flexible core 12 that is preferably made of a degradable material that can be washed or brushed away, such as medical grade silicone, acrylic such as carbopol resins or cellulose products. Col.

[2] Fontenot et al. also does not teach the use of the claimed tissue adhesion agent that includes at least one hydrophilic polymer.

3 lines 60 – 67 and col. 4 lines 1 – 8. A recess or channel 14 formed at the center of the core 12 is filled with a thin layer of a gel 16 that carries a whitening agent. Col. 4 lines 25 – 39. When placed on the teeth, the backing layer 20 (made of paper, foam, fabric, polyolefin or the like) is used to help mold the delivery system onto the teeth, and is then peeled away. Col. 5 lines 27 – 35. Thus, Wiesel fails to teach "a dental tray having flexibility so as to readily conform to a person's teeth during use" as well as a protective adhesive composition "which includes a dental bleaching agent in a lower concentration that the dental bleaching agent contained in the dental bleaching gel."[3]

For at least the forgoing reasons, applicants claimed invention is patentable over the prior art. Further, since there are no other unresolved issues of record, favorable reconsideration and action is courteously requested. In the event the Examiner finds any remaining impediment to allowance of this application that may be clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney.

Dated this 16 day of June, 2006.

Respectfully submitted,

RICK D. NYDEGGER
Registration No. 28,651
Attorney for Applicant
Customer No. 022913

RDN:aam
AAM0000001113V001

[3] It was noted at the interview by the Examiners that Wolf, Fontenot et al. and Wiesel are the closest prior art of record. In that respect, applicants note that the remaining applied art of record, Sagel et al. and Jensen et al., are far less pertinent that any of those references. Sagel et al. discloses a whitening strip but fails to disclose any kind of protective adhesive composition. This was acknowledged in the Office Action at p. 10 ("The reference differs from the instant claims insofar as it does not teach a protective adhesive composition positioned relative to said barrier layer."). However, while Jensen et al. discloses a polymerizable isolation barrier, that barrier layer is designed for placement using a syringe, during an in-office bleaching procedure, not as part of a dental device per se. Thus, Jensen et al. and Sagel et al. are not properly combinable inasmuch as there clearly is lacking any suggestion or motivation to use the in-office barrier material, applied by syringe, with the whitening strip (an OTC product) of Sagel et al.